

IN THE CLAIMS:

Please delete Claims 1-27, as originally filed in International Application No. PCT/NO99/00220, without prejudice to or disclaimer of the subject matter recited in those claims.

Please add Claims 28-51 as follows:

*Rule 1.126  
A1 Sub B2* ~~24~~  
~~28.~~ A telomerase peptide capable of generating a T cell response directed against telomerase and comprising an amino acid residue sequence selected from the group consisting of EARPALLTSRLRFIPK (SEQ ID NO: 2), DGLRPIVNMDYVVGAR (SEQ ID NO: 3), GVPEYGCVVNLRKTVVNF (SEQ ID NO: 4), ILAKFLHWL (SEQ ID NO: 9), ELLRSFFYV (SEQ ID NO: 10), LMSVYVVELLRSEFFYVTE (SEQ ID NO: 7), and the sequences set out in Table 1 and Table 2 herein.

~~25~~  
~~29.~~ The telomerase peptide according to claim 28, wherein the peptide is between 8 and 25 amino acid residues long.

~~26~~  
~~30.~~ A nucleic acid that encodes a peptide according to claim 28.

~~27~~  
~~31.~~ A pharmaceutical composition comprising at least one nucleic acid according to claim 30, and a pharmaceutically acceptable carrier or diluent.

~~28~~<sub>31</sub>. The pharmaceutical composition according to claim 31, wherein the composition is for the treatment or prophylaxis of cancer.

~~29~~<sub>33</sub>. The pharmaceutical composition according to claim 32, wherein the cancer is selected from the group consisting of breast cancer, prostate cancer, pancreatic cancer, colorectal cancer, lung cancer, malignant melanoma, leukemias, lymphomas, ovarian cancer, cervical cancer and biliary tract carcinomas.

~~30~~<sub>34</sub>. A pharmaceutical composition comprising at least one telomerase peptide according to claim 28, and a pharmaceutically acceptable carrier or diluent.

~~31~~<sub>35</sub>. The pharmaceutical composition according to claim 34, wherein the composition is for the treatment or prophylaxis of cancer.

~~32~~<sub>36</sub>. The pharmaceutical composition according to claim 35, wherein the cancer is selected from the group consisting of breast cancer, prostate cancer, pancreatic cancer, colorectal cancer, lung cancer, malignant melanoma, leukemias, lymphomas, ovarian cancer, cervical cancer and biliary tract carcinomas.

~~33~~  
31. A method of preparing a pharmaceutical composition, comprising the step of mixing at least one telomerase peptide of claim 28 with a pharmaceutically acceptable carrier or diluent.

~~34~~  
38. A method of preparing a pharmaceutical composition, comprising the step of mixing at least one nucleic acid of claim 30 with a pharmaceutically acceptable carrier or diluent.

~~35~~  
39. A pharmaceutical composition comprising:

- (a) at least one telomerase peptide according to claim 28,
- (b) at least one peptide capable of inducing a T cell response directed against either (i) an oncogene protein or peptide, or (ii) a mutant tumor suppressor protein or peptide, and
- (c) a pharmaceutically acceptable carrier or diluent.

~~36~~  
40. A method of preparing a pharmaceutical composition, comprising the step of forming a mixture of:

- (a) at least one telomerase peptide according to claim 28,
- (b) at least one peptide capable of inducing a T cell response directed against either (i) an oncogene protein or peptide or (ii) a mutant tumor suppressor protein or peptide, and
- (c) a pharmaceutically acceptable carrier or diluent.

37/41. The pharmaceutical composition according to claim 39, wherein the oncogene protein or peptide is a mutant p21-ras protein or peptide, and the tumor suppressor protein or peptide is selected from the group consisting of a retinoblastoma protein or peptide and a p53 protein or peptide.

38/42. The method of preparing a pharmaceutical composition according to claim 40, wherein the oncogene protein or peptide is a mutant p21-ras protein or peptide, and the tumor suppressor protein or peptide is selected from the group consisting of a retinoblastoma protein or peptide and a p53 protein or peptide.

SubB4 39/43. A method of generating T lymphocytes capable of recognizing and destroying tumor cells in a mammal, comprising the steps of:

- (a) taking a sample of T lymphocytes from a mammal, and
- (b) culturing the T lymphocyte sample in the presence of an amount of a telomerase peptide sufficient to generate telomerase-specific T lymphocytes, wherein the telomerase peptide comprises an amino acid residue sequence selected from the group consisting of: EARPALLTSRLRFIPK (SEQ ID NO: 2), DGLRPIVNMDYVVGAR (SEQ ID NO: 3), GVPEYGCVVNLRKTVVNF (SEQ ID NO: 4), ILAKFLHWL (SEQ ID NO: 9),

*Sub B4* ELLRSFFYV (SEQ ID NO: 10), LMSVYVVELLRSFFYVTE (SEQ ID NO: 7), and the sequences set out in Table 1 and Table 2 herein.

*40*  
44. A telomerase-specific T lymphocyte generated by the method according to claim 43.

*Sub B5*  
*41*  
45. A pharmaceutical composition comprising a telomerase-specific T lymphocyte according to claim 44, and a pharmaceutically acceptable carrier or diluent.

*42*  
46. The pharmaceutical composition according to claim 45, wherein the composition is for the treatment or prophylaxis of cancer.

*43*  
47. The pharmaceutical composition according to claim 46, wherein the cancer is selected from the group consisting of breast cancer, prostate cancer, pancreatic cancer, colorectal cancer, lung cancer, malignant melanoma, leukemias, lymphomas, ovarian cancer, cervical cancer and biliary tract carcinomas.

*44*  
48. A method of treating a mammalian patient afflicted with cancer, comprising the step of administering to the patient an

effective amount of the pharmaceutical composition according to any one of claims 31, 34, 39 or 45.

~~45~~  
49. The method of treatment according to claim 48, wherein the cancer is selected from the group consisting of breast cancer, prostate cancer, pancreatic cancer, colorectal cancer, lung cancer, malignant melanoma, leukemias, lymphomas, ovarian cancer, cervical cancer and biliary tract carcinomas.

A1 ~~46~~  
50. The method of treatment according to claim 48, wherein the cancer is colon cancer.

~~47~~  
51. A method of vaccinating a mammalian patient in order to obtain resistance against cancer comprising the step of eliciting a T-cell response in the patient by stimulating the patient's immune system *in vivo* or *ex vivo* with a telomerase peptide according to claim 28. ~~49~~.

#### REMARKS

Applicants request early examination on the merits and favorable consideration of this application.

Claims 28-51 are presently pending in this application, with claims 28 and 43 being independent. Claims 1-27 as